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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,623

03/17/2004

Holger Mathiszik

414-35883-US

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44871 7590 04/09/2007  
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EXAMINER

COY, NICOLE A

ART UNIT

PAPER NUMBER

3672

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/802,623	Applicant(s) MATHISZIK, HOLGER	
	Examiner Nicole Coy	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 13-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claim 17 is objected to because of the following informalities: The first word of the sentence is not capitalized. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Cray et al. (USP 6,237,404).

With respect to claim 13, Cray et al. discloses an apparatus for making measurements during drilling of a borehole, the apparatus comprising: (a) a formation sensor (FE) sensor (see column 2 lines 61-64 and column 3 lines 44-50) on a bottom hole assembly (BHA) configured to make measurements continuously (wherein the sensor is capable of making measurements continuously); (b) at least one sensor configured to concurrently make quality control (QC) measurements (see column 3 lines 38-66 and column 4 lines 36-49) while said FE measurements are being made, said QC measurements including at least one measurement not related to motion of said BHA; and (c) a processor (see column 1 lines 24-29) on the BHA configured to: (I) store samples of said FE measurements in a working memory; (II) analyze the QC

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measurements; and (III) based on the analysis, store selected samples of said FE measurements in a permanent memory (wherein the processor is capable of being configured to perform the above steps).

With respect to claim 14, Crary et al. discloses that FE sensor is selected from the group consisting of: (i) a hydrophone response to a seismic signal from a surface source, (ii) a geophone response to a seismic signal from a surface source, (iii) an accelerometer response to a signal from a surface source, and (iv) an acoustic sensor responsive to a signal from a surface source, and (v) an acoustic sensor response to a signal from a source in another borehole (see column 3 lines 44-50).

With respect to claim 15, Crary et al. discloses that at least one sensor is configured to be responsive to a least one of: (i) a weight on bit (WOB), (ii) a flow rate of a fluid in said borehole, (iii) a level of a tube wave in said borehole, (iv) a level of motion of a non-rotating sleeve on said BHA, and (v) a measurement made by a near bit accelerometer (see column 4 lines 37-40).

With respect to claim 16, Crary et al. discloses that the QC measurements further comprise a measurement of motion of said BHA (see column 4 lines 37-40).

With respect to claim 17, Crary et al. discloses an apparatus for making measurements during drilling of a borehole, the method comprising: (a) a sensor on a bottomhole assembly (BHA) configured to make quality control (QC) measurements (see column 3 lines 38-66 and column 4 lines 36-49) during drilling of said borehole, said QC measurements including at least one measurement not related to a motion of said BHA; (b) a processor (see column 1 lines 24-29) configured to: (I) analyze said QC

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measurements; (II) use the results of the analysis for predicting an initial time when measurements made by a formation evaluation (FE) sensor on said BHA are expected to be of acceptable quality; and (III) record measurements with said FE sensors over a time interval that starts earlier than said initial time (wherein the processor is capable of being configured to perform the above steps).

With respect to claim 18, Crary et al. discloses that the processor is configured to do said predicting based at least in part on measurements made by an axial accelerometer on the BHA (wherein the processor is capable of being configured to do the above claimed predicting).

With respect to claim 19, Crary et al. discloses that the processor is configured to do said predicting is based at least in part on monitoring of a mud flow in said borehole (wherein the processor is capable of being configured to do the above claimed predicting).

#### ***Allowable Subject Matter***

4. Claims 1-12 are allowed.

#### ***Response to Arguments***

5. Applicant's arguments filed 2/27/07 have been fully considered but they are not persuasive. Applicant argues that claims 13-19 should be allowable because they contain the substantive elements corresponding to the existing elements of claim 1. However, claims 13-19 are directed towards an apparatus, so the prior art elements

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only need to be capable of performing the claimed intended uses. The sensors and processors in Crary et al. are capable of performing the claimed intended uses, and thus the claims are not allowable over the prior art.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is 571-272-5405. The examiner can normally be reached on M-F 7:30-5:00, 1st F off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nac

  
William Neuder  
Primary Examiner